

# HAKAN OKAY

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## EXPERIENCE

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**Software Engineer** - *TwinsMusic Enterprises* - Ottawa, ON

September 2023 - Present

- Developed a subscription-based music library using **Next.js** and **TypeScript**, styled with **Tailwind**, deployed on **Vercel**.
- Used **AWS S3** pre-signed URLs and **JWT** authentication to securely deliver media content to subscribers.
- Created the data model using **Prisma** and used **Planetscale** to host a MySQL database on the cloud.
- Implemented CI/CD pipelines on **GitHub Actions**, running **Jest** unit tests to prevent bugs and errors on production.
- Mentored a team of four developers and did code reviews.

**Freelance Software Developer** - *hakanokay.dev* - Ottawa, ON

February 2023 - September 2023

- Developed a microservices Spring Boot app using **Eureka** for service discovery, **Kafka** for notifications, **MongoDB** and **MariaDB** for databases, **Testcontainers** for testing, and **Prometheus**, **Loki** and **Grafana** for observability.
- Trained and deployed a machine learning model for an e-commerce with ~4700 monthly users using **Python**, **Scikit-learn** and **BigQuery**, boosting revenue by 15% via personalized marketing through predictions.
- Built and deployed a web service using **FastAPI**, **Docker** and **Google Cloud Run** to access predictions of machine learning models uploaded through a drag-and-drop interface built with **Streamlit**.
- Developed a web application using **Next.js**, **FastAPI**, **MongoDB** and **Docker** to manage the sale records of a store, reducing data related issues by 80%.
- Improved the efficiency of an ETL process ingesting customer management data from a third-party API by 25% using **Python**, **Pandas** and **BigQuery**.

**Software Engineer** - *Bruin* - Ottawa, ON

March 2022 - February 2023

- Built an SQL generation engine using **Jinja**, **Python** and **SQL** to automate the data modelling processes, allowing faster onboarding.
- Debugged the parser of a SQL-like querying language in **Python** designed for querying cloud warehouses and increased the test coverage.
- Implemented the ability to run data transformations using **SQL** and **Python** on the same pipeline to a CLI tool written in **Go**, improving development efficiency.
- Created and optimized **RESTful API** endpoints using **FastAPI** to generate analytics reports, integrating more KPIs and improving response times by 15%.
- Built and managed ETL pipelines to process ~1 billion rows of user-generated data daily, originating from 10 clients across 35 mobile applications and various backends, warehoused on **Snowflake**, **BigQuery** and **Redshift**.

## SKILLS

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**Languages:** Python, SQL, TypeScript, JavaScript, Go, Java

**Frameworks:** React, Next.js, Node.js, Spring Boot, Tailwind, FastAPI

**Tools:** Linux, Git, Docker, Airflow, Prisma, GCP, AWS

**Databases:** MySQL, PostgreSQL, MongoDB

## EDUCATION

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**Algonquin College**

Diploma in Computer Programming | Honours

September 2022 - February 2024

Ottawa, ON

**Miul & Data Science Academy**

Certificate of Data Science and Machine Learning | Bootcamp

December 2021 - March 2022

Izmir, Turkey

**Akdeniz University**

Bachelor of Science in Engineering

September 2014 - September 2019

Antalya, Turkey